IN THE CLAIMS:

1. (Cancel) A method for controlling flooding in a bridged network having a bridge connected to a plurality of networks, said method comprising:

a) allowing broadcast flooding until a mapping of a MAC address to a port is performed by the bridge connected to the plurality of networks; and

b) disallowing broadcast flooding after the mapping is achieved.

2. (Cancel) The method of claim 1, wherein said allowing and disallowing of broadcast flooding is carried out for each MAC address independently.

3. (Cancel) The method of claim 1, wherein said bridge maintains a data structure to determine when to allow or disallow broadcast flooding.

4. (Cancel) The method of claim 3, wherein said data structure is a filter table.

5. (Cancel) The method of claim 4, wherein said filter table contains MAC address information with associated flooding time period.

Claims 6-8 are canceled.

9. (Cancel) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for

controlling flooding in a bridged network having a bridge connected to a plurality of networks, said method comprising:

a) allowing broadcast flooding until a mapping of a MAC address to a port is performed by the bridge; and

b) disallowing broadcast flooding after the mapping is achieved.

10. (Cancel) The program storage device of claim 9, wherein said allowing and disallowing of broadcast flooding is carried out for each MAC address independently.

11. (Cancel) The program storage device of claim 9, wherein said bridge maintains a data structure to determine when to allow or disallow broadcast flooding.

12. (Cancel) The program storage device of claim 11, wherein said data structure is a filter table.

13. (Cancel) The program storage device of claim 12, wherein said filter table contains MAC address information with associated flooding time period.

14. (New) A method for controlling flooding in a bridged network having a bridge connected to a plurality of networks, the method comprising:

processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists; and

if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address, iteratively:

performing broadcast flooding of packets for a first predetermined time period; and

ceasing broadcast flooding of packets for a second predetermined time period.

15. (New) The method of claim 14, wherein said first predetermined time period and said second predetermined time period is set by a network administrator.

16. (New) The method of claim 14, further comprising, prior to said performing broadcast flooding of packets, consulting a filter table to determine said first predetermined time period.

17. (New) The method of claim 14, further comprising setting a flag to indicate a quiet period in which no broadcast flooding is to be performed after said first predetermined time period passes.

18. (New) The method of claim 14, wherein, an entry is made in a filter table if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address.

19. (New) The method of claim 18, wherein the entry is removed from the filter table after a port associated with the destination MAC address replies to the broadcast flooding of packets.

20. (New) The method of claim 14, wherein an entry is made in the filter table indicating a number of packets that are directed at the destination MAC address.

21. (New) The method of claim 20, wherein the entry indicating the number of packets directed at a destination address is used to determine which entry to delete from the filter table if the filter table becomes overpopulated with entries.

22. (New) A computer program product containing instructions which, when executed by a computer, controls flooding in a bridged network having a bridge connected to a plurality of networks, by:

processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists;

if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address, iteratively:

performing broadcast flooding of packets for a first predetermined time period; and

ceasing broadcast flooding of packets for a second predetermined time period.

23. (New) The computer program product of claim 22, wherein said first predetermined time period and said second predetermined time period is set by a network administrator.

24. (New) The computer program product of claim 22, further comprising instructions which, when executed by a computer, prior to said performing broadcast flooding of packets, consult a filter table to determine said first predetermined time period.

25. (New) The computer program product of claim 22, further comprising instructions which, when executed by a computer, set a flag to indicate a quiet period in which no broadcast flooding is to be performed after said first predetermined time period passes.

26. (New) The computer program product of claim 22, further comprising instructions which, when executed by a computer, insert an entry in a filter table if no mapping between the destination MAC address and port exists.

27. (New) The computer program product of claim 26, further comprising instructions which, when executed by a computer, remove the entry from the filter table after a port associated with the destination MAC address replies to the broadcast flooding of packets.

28. (New) The computer program product of claim 22, further comprising instructions which, when executed by a computer, make an entry in the filter table indicating a number of packets that are directed at the destination MAC address.

29. (New) The method of claim 28, further comprising instructions which, when executed by a computer, examine the entry indicating the number of packets directed at a destination address to determine which entry to delete from the filter table if the filter table becomes overpopulated with entries.

30. (New) A system for controlling flooding in a bridged network having a bridge connected to a plurality of networks, the system comprising:

means for processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists; and

means for determining if no mapping between the destination MAC address and port exists, and, until a reply is received from a port associated with the destination MAC address, iteratively:

performing broadcast flooding of packets for a first predetermined time period; and

ceasing broadcast flooding of packets for a second predetermined time period.